

a pick and place machine including a controller connected to a movable pick head and a component feed source, said pick head having access to said component feed source; and

a fiducial alignment detector comprising a receiver directed toward said feed source and connected to said controller, wherein said controller contains instructions which, when executed by said controller, cause said controller to compare a detected fiducial alignment with a predetermined fiducial alignment that uniquely distinguishes between symmetric alignments of the leads.

*Concluded*

*Sub D 27* 44. (Twice Amended) A component transfer apparatus for a component having leads, said apparatus comprising:

a pick and place machine having a component feed source and a movable pick head having access to said component feed source;

a fiducial alignment detector directed toward said component feed source; and

a controller coupled to said fiducial alignment detector and containing instructions which, when executed by said controller, cause said controller to compare a detected fiducial alignment with a predetermined fiducial alignment uniquely distinguishes between symmetric alignments of the leads.

*C 2*

*Sub D 37* 61. (Twice Amended) A component transfer apparatus for a component having leads, said apparatus comprising:

a pick and place machine having a component feed source and a movable pick head having access to said component feed source;

*C 3* a fiducial alignment detector directed toward said component feed source and having an alignment signal output, and

a controller coupled to said detector alignment signal output and containing instructions which, when executed by said controller, cause said controller to compare a detected fiducial alignment with a predetermined fiducial alignment uniquely distinguishes between symmetric alignments of the leads.

C3

Concluded

62. (Twice Amended) The component transfer apparatus of claim 61, wherein said alignment signal output is a warning.

SUB D 4

64. (Twice Amended) A component transfer apparatus for a component having leads, said apparatus comprising:

a pick and place machine having a component feed source and a movable pick head having access to said component feed source;

a fiducial alignment detector directed toward said component feed source; and

a controller coupled to said detector and containing instructions which, when executed by said controller, cause said controller to compare a detected fiducial alignment with a predetermined fiducial alignment that uniquely distinguishes between symmetric alignments of the leads, and cause said movable pick head to pick a component from said component feed source.

C4

SUB D 5

72. (Twice Amended) A component transfer apparatus for a component having leads, said apparatus comprising:

a pick and place machine having a component feed source and a moveable pick head, wherein said component feed source includes at least one nest that defines an asymmetric recess and said moveable pick head has access to said component feed source;

a fiducial alignment detector directed toward said feed source;

a controller containing instructions which, when executed by said controller, cause said controller to compare a detected fiducial alignment with a predetermined fiducial alignment that uniquely distinguishes between symmetric alignments of the leads and cause said controller to advance said component feed source.

C5

74. (Twice Amended) A component transfer apparatus for a component having leads, said apparatus comprising:

component conveying means;

means for detecting a fiducial alignment adjacent said component conveying means;

and

C6